What is claimed is:

1. An isolated DNA sequence encoding a polypeptide that is at least 80% identical with the sequence of amino acid residues selected from the group consisting of 1 to 442 of SEQ ID NO:2 and 1 to 423 of SEQ ID NO:4, the polypeptide being capable of binding to itself.
2. An isolated DNA sequence encoding a polypeptide having an amino acid sequence selected from the group SEQ ID NO:2 and SEQ ID NO:4.
3. An isolated DNA encoding a soluble polypeptide wherein said soluble polypeptide comprises an amino acid sequence that is at least 90% identical to a sequence selected from the group consisting of:
    a) amino acids x_1 to 374 of SEQ ID NO:2, wherein x_1 is amino acid 1 or 39
    b) amino acids x_1-356 of SEQ ID NO:4; wherein x_1 is 1 or 21; and,
    c) a fragment of the sequences of a) or b),

    wherein the soluble polypeptide is capable of binding to itself.
4. An isolated DNA encoding a soluble polypeptide wherein said soluble polypeptide comprises an amino acid sequence selected from the group consisting of:
    a) amino acids x_1 to 374 of SEQ ID NO:2, wherein x_1 is amino acid 1 or 39
    b) amino acids x_1-356 of SEQ ID NO:4; wherein x_1 is amino acid 1 or 21; and
    c) a fragment of the sequences of a) or b).

5. DNA selected from the group consisting of:
    a) nucleic acids x_1 to 1341 of SEQ ID NO:1, wherein x_1 is nucleic acid 16 or 129;
    b) nucleic acids x_1 to 1272 SEQ ID NO:3, wherein x_1 is nucleic acid 2 or 61;
    c) DNA sequences that hybridize under moderately stringent conditions to the DNA of a) or b); and which DNA sequences encode a polypeptide that binds itself; and
    d) DNA complementary to the DNA of a), b) and c).
    e) DNA sequences that, due to the degeneracy of the genetic code, encode polypeptide having the amino acid sequence of the polypeptide encoded by the DNA sequences of a), b), c) or d.
6. A polypeptide encoded by DNA selected from the group consisting of:
    a) nucleic acids x_1 to of SEQ ID NO:1, wherein x_1 is nucleic acid 16 or 129;
    b) nucleic acids x_1 to 1272 of SEQ ID NO:3, wherein x_1 is nucleic acid 2 or 61;
    c) DNA sequences that hybridize under moderately stringent conditions to the DNA of a) or b); and which DNA encodes a LDCAM that binds itself;

d) DNA complementary to the DNA of a), b) and c), and

e) DNA sequences degenerate to the those of a), b), c) and d).

7. A polypeptide comprising an amino acid sequence that is at least 80% identical to an amino acid sequence selected from the group consisting of SEQ ID NO:2 and SEQ ID NO:4, the polypeptide being capable of binding to itself.

8. A soluble polypeptide comprising an amino acid sequence selected from the group consisting of:

a) amino acids x_1 to 374 of SEQ ID NO:2, wherein x_1 is amino acid 1 or 39

b) amino acids x_1-356 of SEQ ID NO:4; wherein x_1 is amino acid 1 or 21; and

c) a fragment of the sequences of a) or b), wherein the fragment is capable of binding itself.

9. A soluble polypeptide comprising an amino acid sequence that is at least 90% identical to an amino acids sequence selected from the group consisting of:

a) amino acids x_1 to 374 of SEQ ID NO:2, wherein x_1 is amino acid 1 or 39

b) amino acids x_1-356 of SEQ ID NO:4; wherein x_1 is amino acid 1 or 21; and

c) a fragment of the sequence of a) or b), wherein the polypeptide fragment is capable of binding to itself.

10. A fusion protein comprising an amino acid selected from the group consisting of:

a) amino acids x_1 to 374 of SEQ ID NO:2, wherein x_1 is amino acid 1 or 39

b) amino acids x_1-356 of SEQ ID NO:4; wherein x_1 is amino acid 1 or 21; and

c) a fragment of the sequence of a) or b), wherein the polypeptide fragment is capable of binding to itself.

11. A recombinant expression vector comprising DNA of claim 5.

12. A process for preparing a polypeptide, the process comprising culturing a host cell transformed with an expression vector of claim 11 under conditions that promote expression of the polypeptide, and recovering the polypeptide.

13. A composition comprising a suitable carrier and a polypeptide of claim 7.

14. A process for modulating a T cell immune response in a mammal afflicted with an inflammatory disease, comprising administering a therapeutically effective amount of the composition of claim 13 to the mammal.

15. A process for generating natural killer cells, the process comprising administering, to an individual, a pharmaceutical composition comprising a therapeutic selected from the group consisting of:

(a) a fusion protein of claim 10;

(b) a polypeptide of claim 8; and

(c) a polypeptide of claim 7.

16. A process for treating an infectious disease in an individual, the process comprising administering to the individual a pharmaceutical composition comprising a therapeutic selected from the group consisting of:
    (a) a fusion protein of claim 10;
    (b) a polypeptide of claim 8; and
    (c) a polypeptide of claim 7.
17. A process for killing tumor cells, the process comprising contacting the tumor cells with a pharmaceutical composition comprising a compound selected from the group consisting of:
    (a) a fusion protein of claim 10;
    (b) a polypeptide of claim 8; and
    (c) a polypeptide of claim 7